River and station	Flood stage	Above flood stages—dates		Crest	
		From-	То-	Stage	Date
mississippi drainage—continued Beaver: Beaver Falls, Pa	Feet 11	14	17	Feet 13. 1	1927 Dec. 14.
Shenango: Sharon, Pa	9	114	3 17	12.3 10.8	Dec. 2. Dec. 14.
Muskingum: McConnelsville, Ohio Beverly, Ohlo Marietta, Ohio	22 25 28	15 16 15	19 16 19	24. 3 25. 1 34. 5	Dec. 17. Dec. 16. Dec. 17.
Tuscarawas: Gnadenhutten, Ohio		(²) 13	$\frac{5}{20}$	14, 2 15, 4	Dec. 2-3. Dec. 17.
Coshocton, Ohio		1 14	4 19	14. 7 14. 4	Dec. 2. Dec. 16.
Walhonding: Walhonding, Ohlo Scioto: Larue, Ohio	8 11	1 14	3 2 15	14. I 14. 1 14. 4	Dec. 1. Do. Dec. 14.
Prospect, Ohio	10	I 15	3 17	12.9 12.7	Dec. 2. Dec. 15.
Bellpoint, Ohio	9 10	$\begin{array}{c c} 1 \\ 2 \end{array}$	1 3	9. 7 13. 5	Dec. 1. Dec. 3.
Chillicothe, Ohio	16	14	17	14. 0 17. 6	Dec. 15. Dec. 3. Dec. 16.
Olentangy: Delaware, Ohio Little Miami: Kings Mills, Ohio Wabash:	9 17	15	17 1 14	19. 1 12. 9 20. 7	Dec. 1. Dec. 14.
Lafayette, Ind		(2) 14	10 18	21, 9 18, 8	Dec. 2. Dec. 16.
Covington, Ind	16	(2) 2 6 3	20 21 25 25	25. 0 21. 2 19. 1 22. 1	Dec. 4. Dec. 5. Dec. 9. Dec. 9, 17.
l'ippecanoe: Norway, Ind	- 6	(*)	26 29	6. 5 6. 1	Dec. 1, 2, 14, 16, 2 Dec. 8–9.
White: Decker, Ind	18	5 15	10 23	19. 3 20. 9	Dec. 31-22
Seymour, Ind Williams, Ind Shoels, Ind	10 10 20	1 15 18	3 15 18 6	12. 5 11. 5 10. 5 20. 4	Dec. 2. Dec. 15. Dec. 18. Dec. 6.
White, West Fork:		18	20	21, 2 19, 7	Dec. 19.
Elliston, Ind Edwardsport, Ind	. 19 15	3 15 2	17 6	21. 0 17. 0	Dec. 4. Dec. 17. Dec. 5.
Elk: Fayetteville, Tenn	14	15 31	20 31	17. 5 16. 3	Dec. 18-19 Dec. 31.
Morris, Ill Peru, Ill	13 14	(2) 8	17	14. 7 15. 4 20. 0	Dec. 1. Dec. 15-16
Henry, Ill	10	(2)	(3)	14. 4 20. 9	Dec. 18-19 Dec. 17-18 Dec. 18-20
Havana, Ill. Beardstown, Ill.	14 14	1 2	(1) (2)	18. 1 19. 3	Dec. 19. Dec. 16-18
Pearl, Ill	12 11	4	(*) 4	15. 8 15. 5	Dec. 20. Dec. 3.
Valley Park, Mo	14 12	1 15 2	4 17 3	16. 8 16. 9 13. 9	Do. Dec. 16.
St. Francis: St. Francis, ArkArkansas:	17	17	28	26. 1	Dec. 3. Dec. 19.
Dardanelle, Ark Morritton, Ark Yancopin, Ark Petit Jean: Danville, Ark	20 20 29 20	14 14 17 15	14 14 17 17	23. 8 20. 0 29. 1 22. 7	Dec. 14. Do. Dec. 17. Dec. 16.
White: Calico Rock, Ark Batesville, Ark	18 23	14 14	17 18	39. 6 37. 6	Dec. 14. Dec. 15.
Georgetown, Ark	26 22 24	16 19 22	21 29 29	29. 7 25. 4 25. 7	Dec. 18. Dec. 22. Dec. 24.
Buffalo: Gilbert, Ark	30 11	14	14	39. 0 15. 5	Dec. 14. Do.
Leeper, Mo	11 14 11	14 14 15	15 17 28	16. 0 18. 1 15. 1	Do. Dec. 15. Dec. 19. Dec. 31.
Black Rock, Ark	14	31 14	(3)	11. 0 25. 3	Dec. 31. Dec. 15.
WEST GULF DRAINAGE					
Frinity: Trinidad, Tex	28	19	24	28. 5	Dec. 21-22
PACIFIC DRAINAGE Columbia: Vancouver, Wash	15	(2)	2	16. 3	Nov. 29.
Willamette:	7	(2)	4		
Harrisburg, Oreg	15	(2)	3	17.5	Do.

² Continued from last month.

MEAN LAKE LEVELS DURING DECEMBER, 1927

By United States Lake Survey

[Detroit, Mich., January 5, 1928]

The following data are reported in the Notice to Mariners of the above date:

Data	Lakes 1					
	Superior	Michigan and Huron	Erie	Ontario		
Mean level during December, 1927: Above mean sea level at New York Above or below	Feet 602. 39	Feet 578, 82	Feet 571. 51	Feet 245.65		
Mean stage of November, 1927 Mean stage of December, 1925 Average stage for December, last	$-0.15 \\ +0.75$	→0.09 +0.57	+0.40 +0.05	+0.80 +0.23		
10 years. Highest recorded December stage Lowest recorded December stage.	+0.52 -0.74 $+2.14$	$ \begin{array}{r} -0.56 \\ -3.76 \\ +1.28 \end{array} $	-0.02 -2.03 $+1.12$	+0.45 -1.96 +2.22		
Average departure (since 1860) of the December level from the November level.	-0. 27	-0.22	- 0. 08	-0.09		

¹ Lake St. Clair's level: In December, 1927, 574.13 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, DECEMBER, 1927

By J. B. KINCER

General summary.—The outstanding favorable feature of the weather during the first decade of December was the effective relief of the droughty conditions in the southeastern States. Generous to heavy rains there bountifully supplied the soil with needed moisture, which, together with the generally mild temperatures, brought a marked improvement to the agricultural situation. In the trans-Mississippi States cool weather brought frost nearly to the Gulf coast with more or less damage to tender vegetation. Early in the period farm work made good advance in the more eastern States and upper Ohio Valley, but toward its close frequent precipitation and severe wintry conditions over large areas of the country westward to the Rocky Mountains were unfavorable, with little farm work accomplished.

During the second decade frequent rains, followed by cold, windy, disagreeable weather in most sections east of the Mississippi River, made conditions generally unfavorable for outside operations and very little activity on farms was reported. Over the Central and Northern States to the westward the continued abnormally low temperatures and rather severe snowstorms in northern districts were also unfavorable for agricultural interests.

During the last decade in the more northern districts east of the Mississippi River generally ample sunshine, absence of appreciable precipitation, and the frozen ground enabled corn husking to make excellent advance, with much progress reported in other sections to the westward. The lack of adequate snow cover over Central States caused some apprehension during the cold weather. Much hog killing was done in southern areas. In a large part of the Northeast there was very little farm activity, but from the Great Lakes westward there was a revival of outdoor operations, attending the reaction to more favorable weather.

Small grains.—At the beginning of the month grain fields were mostly protected by a snow cover in the northeast as far south as the Potomac Valley, in the Lake region, and in most sections between that region and the Rocky Mountains; the latter part of the first

³ Continued at end of month.